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Observations & Suggestions on Developing Green Jobs in Connecticut

This workgroup brings together a talented diversity of specialties, opinions and stakeholders, who have delivered a great deal of information about what they are doing, and guidance about what the state should do. I congratulate Speaker Donovan and our very able and committed chair, Representative Nardello, for establishing this group and focusing attention on this key area for job growth.

In discussing “green jobs,” we implicitly acknowledge the imperative moving forward to combine environmental and energy concerns with economic development. All 50 states, and countries across the globe, are engaged in efforts based on the same recognition.

Connecticut has a combination of attributes that should, and in some areas do, put us in the lead in green technology and associated jobs.

- Strong manufacturing sector
- Outstanding academic institutions already taking on the curricula needed for this new economy.
- A huge roster of technical experts able to create innovation and advance needed technologies.
- A talented, adaptable workforce that is highly productive and also highly innovative.
- State leaders and institutions committed to addressing these issues, with many active measures already in place.
- An historic access to capital, that while weakened now, should continue to rebound here more quickly than in some other places.

But, to be honest, our combined efforts are often perceived more with frustration and perplexity than with optimism and admiration. Our state’s efforts in this arena frequently are described, fairly or unfairly, as:

- Fragmented and disconnected
- Unreliable and lacking continuity
- Tremendously bureaucratic and lengthy
- Difficult to navigate; opaque
- Underfunded
- Lacking a sense of urgency or enthusiasm

Recognizing that green energy is going to be one of key the global economic drivers of this

century, it is necessary to establish an **ongoing and coordinated effort** to align our state to take advantage of our historic attributes and overcome areas of weakness.

This effort should start with state leaders and agencies whose mission include areas of expertise related to the goal of advancing a green economy and green jobs in our state. The **Department of Economic and Community Development (DECD)** and the **Department of Labor (DOL)** immediately come to mind as natural coordinating bodies.

Beneath and around these agencies are an alphabet soup of essential participants, like CI, CCEF, CCAT, CERC, CASE, DEP, DPUC, universities, colleges and community colleges, and others who do or can contribute to this process.

Obviously, there are also essential stakeholders, including business, labor and particularly the trades, communities, legislators, advocacy groups and others who need and/or want to be involved in the process and have essential contributions to make.

Again, this points out **the need for a coordinating body** that can take on several tasks:

- Assess our current inventory of green jobs
- Identify and prioritize the best opportunities for us moving forward
- Study best practices from around the country to find the most effective and most direct steps being used in other states that are appropriate for Connecticut's circumstances.
- Develop a centralized portal of information and assistance so that those interested in Connecticut as a green job center can quickly and easily find out what we are doing, what is available to them, and who to contact.
- Pro-actively seek out new opportunities, revamp procedures as needed and suggest legislative initiatives to get and keep Connecticut on the forefront of the green economy.

In considering how to proceed, I would suggest some areas of obvious opportunity, along with some programs identified as successful in other states:

Fuel cells: In the past three years, Connecticut fuel cell industry employment grew by **30%**, more than **800 jobs**, even while the economy suffered an historic downturn. This is a manufacturing sector that is finally, but truly, poised for commercialization. It will continue to grow; it is up to us as to whether it will grow here or elsewhere.

Solar energy: The state's commitment to solar is clear. We need to turn this support into a real state economic sector that includes manufacturers, innovators, product research and development, installers and technicians. **Spending millions** to install what increasingly is described as substandard equipment from **China** is simply not the basis for a long-term, vibrant solar energy industry in our state.

Wind power: As a state with the most highly skilled aerospace engineering and manufacturing workforce in the world, it is inconceivable that our technology, equipment and workers cannot be applied to building wind turbine power generation equipment.

Weatherization: The State of New York has launched an innovative program that promises to

tackle residential & commercial energy conservation at every economic level, utilizing existing building trades and newly-trained workers, through long-term financing, a private investment pool, identifying conservation opportunities that save more than they cost, and using the utilities as the coordinating point for the financial transactions involved. They expect to generate up to **14,000 jobs** and cut energy consumption in at least **1 million homes and businesses**. We should adapt and adopt such a program.

Green Jobs Council: The State of Oregon established the Green Jobs Council, using the state workforce investment boards as its core, and brings together a variety of stakeholders, in an ongoing process. They just received more than **\$5 million in federal grants** from the Department of Labor for green job training. Especially with the continued downturn in aerospace employment, we need the coordination of such a committee and an **aggressive pursuit of federal funds**. Though I am aware that Governor Rell established a Green Jobs Partnership Council, it seems like one organization out of money, instead of being the leading, coordinating body. We need inclusion of all stakeholders, coordination of our many efforts and focus by one leading group.

In conjunction with this, we should commit that **green jobs are going to also be good jobs**, with a **living wage and benefits**, and utilizing **existing trades and certifications** while adapting as needed. “**Green Jobs for All**,” a California-based organization that has a national impact, describes the green economy as a mechanism capable of **lifting people out of poverty** through green employment, environmental rehabilitation and renewal of urban areas. Despite our suburban mindset, **Connecticut’s cities will dictate our future**, either as areas of blight or engines of revitalization. We should look at the lessons of “Green Jobs for All.”

Innovation, financing and protection of intellectual property: Connecticut has a remarkable roster of engineers, scientists, inventors and small businesses, who are tackling on their own or in small groups, some of the most pressing issues related to a green, renewable economy. Though our state does have programs that assist in this effort, they are not enough, especially now when credit and investment equity are so unavailable. We need to make more funding available, and work better with innovators to identify and obtain federal funds that may be applicable. Some steps in this regard include:

- Centralize information, applications and assistance. Establish a **green economy “consierge”** who can guide entities and individuals in the right direction.
- Examine further investment of **state pension funds in in-state investments**, especially in green manufacturing, where value and jobs get created and a return on investment stays in the state.
- Despite the unpopularity of **bonding**, it is appropriate for well-considered, targeted investments in the green economy, and to establish more entrepreneurial funding that can generate greater payback than pay-out. Many states, in financial circumstances similar to ours, are creating green economy investment funds through bonding.
- **Patent protection assistance** is needed. Innovators and small businesses with big ideas and cutting edge technologies are often stripped of their intellectual property by large corporations or other countries – because of the cost and complexity of filing and protecting international patents. The **Connecticut Attorney General’s office** should be mandated to provide technical assistance and limited representation to individuals and

small businesses seeking help in this area. If we want the green economy to flourish here in our state, without suppression by hostile business interests or foreign piracy, this is a necessary step.

- **Cut red tape everywhere.** Whether it is the Connecticut Clean Energy Fund, the Department of Public Utility Control, the Siting Council, the Office of Policy and Management, the Department of Economic and Community Development, the Department of Environmental Protection or elsewhere – processes must be streamlined and made reliable and understandable, and move from a culture of “No” to “How do we get this done?”

The Bristol Project: Finally, a word on a project being developed by GrowJobsCT, with a variety of stakeholders. It is the Bristol Renewable Energy and Efficiency Park, an industrial park to be established on three technologies, with the hope of becoming a magnet for future innovation and job growth. The three technologies are being developed by independent innovators, including the American Hydrogen Association, Solar and Thermal Systems, Inc. and Ergcubed. The products being developed are:

- **A large diesel engine modification program**, suitable for locomotives, tugboats and stationary diesel distributive generation units. The retrofit kit reduces diesel fuel consumption by **30%**, eliminates diesel particulate emissions, and brings the equipment into compliance with EPA standards for 2015.
- **A frictionless railcar wheel bearing seal.** The seal can reduce maintenance costs while increasing fuel efficiency by **5%**.
- **A solar-powered generator** that can produce electric power at **\$0.10 (ten cents) a kilowatt**, making it competitive with coal.

We believe that given the potential markets for these products, we can generate **1300 jobs in Bristol in 30 to 50 months after initial funding.**

This project needs about **\$16.6 million** in funding to get into operation – and we are seeking federal and state funding, and responsible private investment.

This endeavor in many ways encapsulates the great assets and strengths of Connecticut, as well as the areas of weakness that hold us back. But we are determined to get this done – and I welcome the interest of anyone on this panel who wants to learn more or help in some way. Contact me at iamjh@sbcglobal.net or at 860 459-5381.

Thank you for giving me the opportunity to address you and participate in this group. And thanks again to Speaker Donovan and Representative Nardello for initiating this process.

John Harrity
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